

ABSTRACT OF THE DISCLOSURE

Devices for electric field control in a field emission display are provided. In one implementation, a device includes a cathode substrate, a
5 plurality of emitter lines formed on the cathode substrate, and a plurality of gate wires crossing over the plurality of emitter lines. Each gate wire has a cross section shaped to produce an electric field between adjacent gate wires that is substantially uniform and substantially flat across a portion of an emitter line in between the adjacent gate wires, the electric field causing an
10 electron emission from the portion of the emitter line. Generally, the electric field is produced by applying a voltage potential difference between at least one gate wire and the emitter line, the electric field sufficient to cause the electron emission.